CENTENNIAL LEVEE FCD GAGE ID# 5123

STATION DESCRIPTION

<u>LOCATION</u> – The gage site is located in western Maricopa County about 5 miles southwest of the intersection of I-10 and Salome Road. Latitude N33° 31' 10", Longitude W113° 15' 37.9". Located in S17 T2N R10W, in the Courthouse Well 7.5-minute quadrangle.

ESTABLISHMENT – Gaging by the District established on July 9, 2003.

DRAINAGE AREA – Not determined

<u>GAGE</u> – The gage is a pressure transducer type instrument. The PT diaphragm is at elevation 0.65 feet gage height.

There are no staff gages at this location.

There are no crest-stage gages at this location.

ZERO GAGE HEIGHT – Zero gage height is defined as a point below the current channel bottom. Elevation 1,261.00 feet NAVD 1988, levels of August 12, 2003.

<u>HISTORY</u> – No previous history at this location. A precipitation only gage was located approximately 1/2 mile downstream since 1984. Level gaging established on July 9, 2003.

REFERENCE MARKS -

RP-CNTLVEE is a rebar spike near the top of the levee on the left bank nearly in line with the gage cross section. Elevation 9.80 feet gage height, or 1,270.80 feet NAVD 1988, levels of August 12, 2003.

RP-1 is a nail approximately 20 feet northeast of RP-CNTLVEE. Elevation 10.76 feet gage height or 1,271.76 feet NAVD 1988, levels of August 12, 2003.

<u>CHANNEL & CONTROL</u> – The channel at the gage is a wide flat channel with a maximum depth of about 4.3 feet. The channel is a uniform 500 feet in width. The channel downstream of the gage is very flat with a slope of only 0.00011 feet/feet. There is sparse vegetation in the channel, but the bottom is rough, due to heavy equipment rutting the hard clay bottom. At low flows, the control is minimal, but is probably the

small low flow channel. At higher flows, the main channel is the control. Some sediment is moveable, but significant channel changes are not anticipated.

RATING – The current rating is Rating #1. It was developed from surveyed data and an HEC-RAS model.

<u>DISCHARGE MEASUREMENTS</u> – Direct measurements can be made at low flows. However, velocities and depths may be too low to measure accurately. Indirect measurements could be made in any suitable reach downstream from the gage since the channel is uniform.

POINT OF ZERO FLOW – 0.34 feet gage height, at the low flow channel.

FLOODS – None recorded to date.

<u>REGULATION</u> – No known regulation

<u>DIVERSIONS</u> – No known diversions

ACCURACY – Fair.

JUSTIFICATION – Monitor water behind Centennial Levee for Dam Safety program.

<u>UPDATE</u> - July 14, 2011

D. E. Gardner